DEATH TRAPS AT STREET CROSSINGS.

Everywhere a Maze of Tracks, with Clanging Gongs and Rushing Cars.

The Whole City Cobwebbed with Danger to Men, Women and Children.

WILL THERE NEVER BE AN END?

A Study of the Greatest Nuisance in This Town, Which Is Daily Getting Worse and Worse.

Eternal vigilance is the price of life on the street-crossings of New York. The metropolis abounds with death-paths, any one of which is as much a menace to the life of the pedestrian as are any of the deadly trolley mazes of Brooklyn. That a daily fatality is not recorded is probably due to the fact that the average New Yorker, inured to the danger, has never lost his caution.

The street railroad companies also realize that in the long run it is cheaper to pay small salaries to crossing watchmen than it is to settle with the injured or the heirs of the mangled deceased. And further, much credit is due to the intelligent activity of the officers of the Broadway squad, who are constantly snatching bewildered pedestrians from the jaws of death.

There was told several years ago a story of a Jerseyman who, desiring to cross Broadway at some place near Fourteenth street, after vainly waiting an hour for a break in the continuous performance of two lines of cable cars, finally walked out to Fifty-ninth street and got around them in safety. He couldn't do that now, as he must take the risk of being run down at Fifty-third street and Seventh avenue, where the cars are shot around the curve leading to the Columbus avenue driveway at a speed which takes away the breath of passengers. The main line cable cars continue at this point straight on their way to Fifty-ninth street. A flagman is stationed at this junction, not especially to warn pedestrians, but to prevent cars swinging into Seventh avenue from Fifty-third street dashing into the sides of northbound cars.

The most complex maze in the city is at Thirty-fourth street and Broadway. The Broadway cable and the Sixth avenue horse car lines, both double tracks, cross at acute angles less than fifty feet south of this point. The Thirty-fourth street crosstown line has a double track that forms one side of a triangle, the other side of which are the cable cars and the Sixth avenue line.

This situation is made a perfect labyrinth by the additional tracks of the Forty-second and Grand street ferry lines. These cars run north on the Broadway cable east track until the crossing of the Sixth avenue cars is reached. The line then follows the Sixth avenue track for some yards, then makes a curve across the triangular space in order to make connection with the north track of the Thirty-fourth street line. The down-bound tracks of the Forty-second street line curve sharply at Thirty-fourth street so as to connect with the west cable track. One more double track curves from Thirty-fourth street into Sixth avenue, connecting with the Sixth avenue track. This curve is not in use. A track once laid in the New York is never taken up.

It will be seen by reference to the diagram that at Thirty-fourth street, in a space of less than 100x100 feet, there are fourteen car tracks, twelve of them in constant use. The Broadway cable cars at this point run during the rush hours under a headway of thirty seconds. The Sixth avenue cars pass each way with one minute intermission, and the ferry line cars are from two to three inches apart.

A stalwart policeman stands on the crossing to snatch pedestrians from beneath the horses' feet, or from the jaws of the grip cars. A watchman employed by the railroads stands somewhere in the network of tracks. He has a hunted look in his eyes, and no insurance company would take a risk on his life except upon payment of an extravagant premium.

One evening recently a stray dog found himself in the centre of this maze of rails. The cable cars clanged their gongs, the horse car bells tinkled, cabs and trucks added to the confusion. The poor dog could see no opening. He crouched to the stones and howled dismally. At last there was an opening on the Sixth avenue side. Like a flash the canine darted through and sped eastward, yelping in terror at every jump.

Just south of Twenty-third street, where the Lexington avenue branch of the Broadway cable curves off into Twenty-third street, the services of three company flagmen are required to avert collisions of the cars and prevent injury to people who have mistaken the Lexington avenue cars for those bound up Broadway and are obliged to change cars here, although they do not receive transfers. The Twenty-third street crosstown line, which makes a deadly triangle at this point, is being converted into an underground trolley line. When these rapid moving cars are added to the present menace there will be a revival of the project to erect a passenger foot bridge over Broadway.

At Fourteenth street and Broadway there is more real danger to pedestrians than at any point yet mentioned. The south crossing is one of the busiest in New York. The cable cars northbound are brought to a standstill at a point twenty feet south of the crossing and then released suddenly to shoot the double curve around the corner of Union square. In the meanwhile the southbound cars come tearing around at the same mad pace. Two policemen and four railroad employes guard this crossing. Rescues are of almost hourly occurrence, as the street is much travelled by women on their way to and from the shopping district.

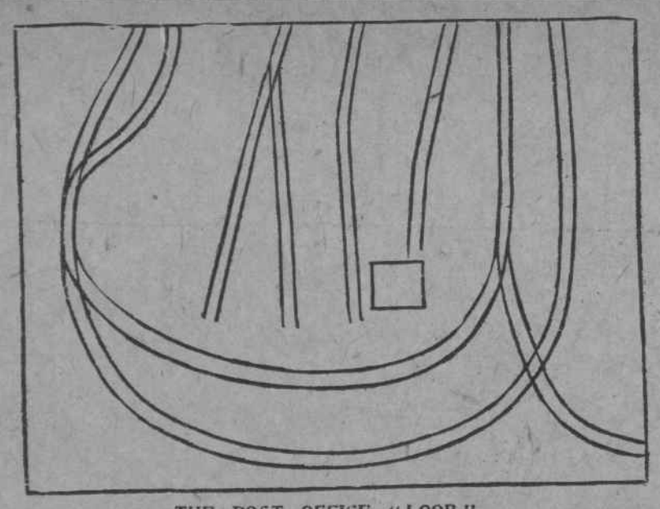
The plaza at the intersection of Broadway and Park row, opposite the Post Office, is nothing but a railroad yard. It is impossible to drive a vehicle across it, and any person who attempts to thread his way through the mass of moving cable and horse cars is supposed to be tired of life. The Third avenue cable makes a curve around the outer edge of the plaza and the space between the curbs is taken up by sixteen lines of rails, all for the accommodation of six street railway corporations.

The crossings and transfer stations at Third avenue and Canal and Grand streets are perilous spots, and there is much danger at all times at One Hundred and Twenty-fifth street and Third avenue.

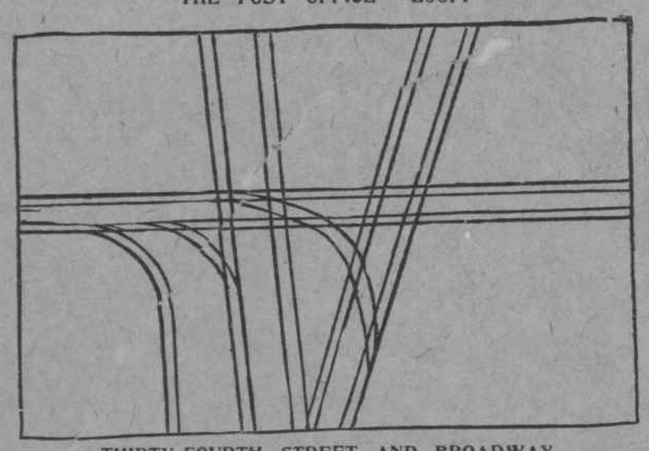
On the upper West Side people think of the network of cable and horse-car tracks at Sixty-fourth street, the Boulevard and Columbus avenue with a shudder. The double-track cable line, with its cars running every forty-five seconds, crosses the Sixth avenue tracks at this point and intersects with the Ninth avenue line. Passengers awaiting transfer are huddled into a narrow little triangle in the centre of the plaza made by the intersecting streets, and move only at their peril. This is a bad place that will yet score its tragedies.

One more danger spot, to which the attention of the authorities has been frequently called, is at Fifty-third street and Eighth avenue. A double-track horse railroad occupies the centre of the street. In the shadow of the "L" road the Columbus avenue cable cars dash along at a speed of ten miles an hour. Eighth avenue is asphalt paved and is the principal thoroughfare for all bicycle riders on their way to and from downtown and Central Park and the Boulevard. Cyclists by the thousand use this street on Summer evenings. The crossing is what is called in railroad circles "blind." The wheelman cannot know whether a cable car is approaching or not until he is fairly on the tracks.

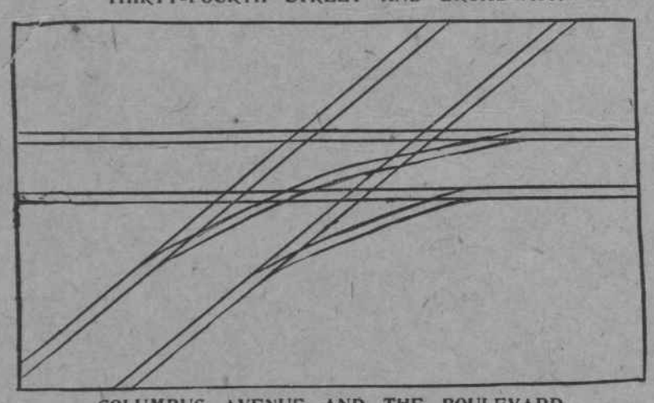
Another especially dangerous spot is on Park row opposite the Pulitzer building and the Bridge entrance. The double tracks upon which the cable and few horse railway lines operate are intersected by the double tracks of the Madison avenue line. It is a brave man that attempts this passage.



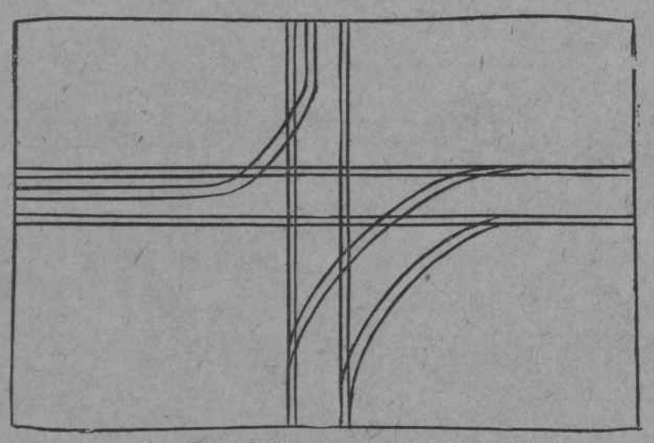
THE POST OFFICE "LOOP."



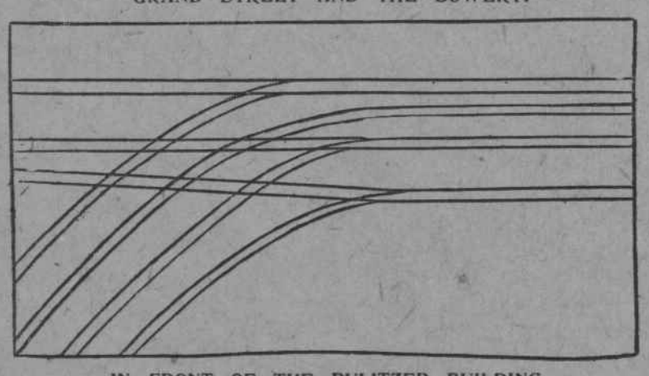
THIRTY-FOURTH STREET AND BROADWAY.



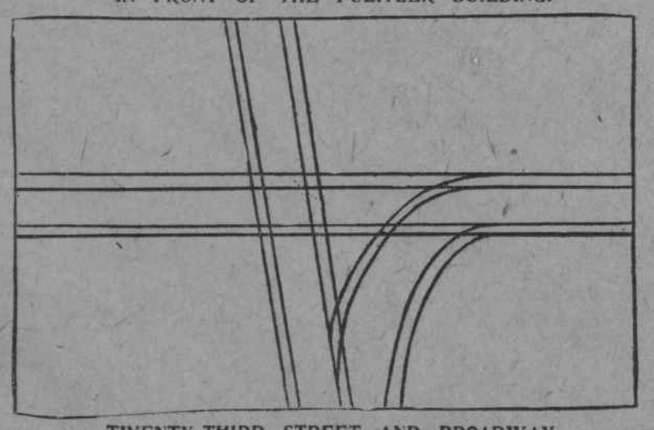
COLUMBUS AVENUE AND THE BOULEVARD.



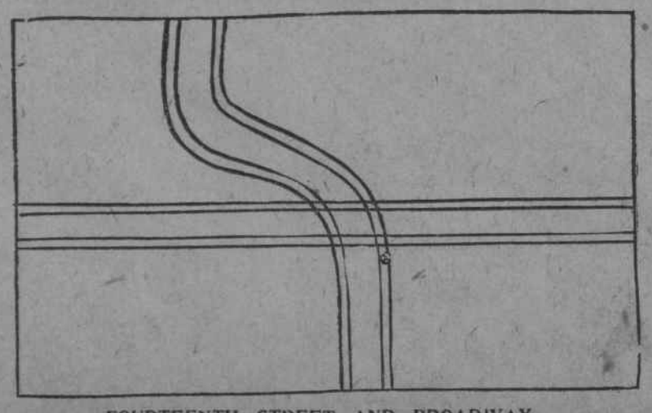
GRAND STREET AND THE BOWERY.



IN FRONT OF THE PULITZER BUILDING.



TWENTY-THIRD STREET AND BROADWAY.



FOURTEENTH STREET AND BROADWAY.

ANNUAL SHOW OF PRIZE BOWWOWS.

The "New Dog" of 1896 a Modern Scion of an Ancient Egyptian Family.

The Ingenuity of Dog Fanciers of To-day Is Exhausted, So Now They Have Turned to the Antique.

BIG PRICES FOR JAP SPANIELS

Boston and Chicago Rivalry in the Production of New Breeds of Terriers. The Question of Cropped Ears.

It is always safe to predict that something new in dogs will be produced for New York's annual dog show, which will open on Wednesday next. The fact is that fashions in dogs are far and away the most fickle of all fashions. There is nothing actually new in the canine line on this side of the ocean, and in Europe just now there is a disposition to unearth some of the ancient breeds and modernize them. And it is now announced that the new dog of the year is a member of an ancient Egyptian family of the time of Anubis.

The Bedouins of the African desert have a greyhound of ancient ancestry, but the true antique greyhound has been found in Asia, still in its primitive state, and this is the animal which is the newest thing in dogs.

This animal is believed to be of the same family as that historic dog of the warrior Ulysses, who, aged and worn with his travels, came home disguised as a beggar and was not recognized by his wife. But his old dog Argus was not deceived. He recognized his master, and then, according to Pope, took a last look and died.

The day of the quaint little Japanese spaniels is by no means past. Dr. Lockhart, a great authority in dog ethnology, presented the skull of a Japanese pug dog to the British Museum, and the great American naturalist, Professor Cope, proposed to put it in a new genus and species which he called Dysodes pravus. Dr. Lockhart says that in China there are still greater monstrosities, and declared that "sometimes in these dogs the eyes are so prominent that I have known a dog to have one of his eyes snapped off by another dog in play."

From these Chinese dogs he also states the Japanese sleeve dogs are derived, and he intimates that very inhumane practices are resorted to in order to keep the dogs small enough for the dog-loving belles of Japan to carry in their open sleeves. Many of these dainty little Japanese spaniels, or sleeve dogs, are imported for American society women, who have been known to give from $500 to $1,000 for very small specimens. One of the best ever received was Jingo, secured by W. J. Burkart, of Brooklyn, who has refused a large sum for it. In weight it is only three pounds, and the eyes are quite large and prominent. The coat stands out about the neck like a mane. The ears are not long and pendulous, like those of the English pet spaniels, but are shaped like a triangle, and the tail is carried over the back, instead of being cut off short, like the tail of his cousin.

It is said that Jingo is the only dog that has ever been presented by the Emperor of Japan to any one not of official rank in his own country. The possession of one of the Emperor's dogs is regarded as a great prize in the dog world. It is a secret as to how Jingo got out of Japan, and the amount of money that tempted him away is only known to the owner and ex-owner.

Dr. Lockhart has explained for the benefit of Englishmen that the reason the Japanese spaniel makes several turns before settling down to a sleeping posture is because his ancestors, the wolves and jackals, were accustomed to do this to make a hole in the ground, and this habit clings notwithstanding five thousand years of domestication. An American boy of four Summers was asked to explain the same phenomenon, and remarked that the reason the dog turned round thus was because one good turn deserved another.

The British bull dog has relied on the old English aristocracy to gain for it the present prominent place it occupies. The liking for these dogs has been fostered by the swell set in America, and at the coming event there will be specimens of unusual beauty, or ugliness, or both. Though these dogs suit New York's inner circle, it was not so with the cultured dog set of Boston. One of the first of this breed exhibited in New England is said to have "turned up his nose with a look of unutterable scorn at pork and beans," and thereafter the breed was condemned.

Next in order came the bull terrier, but he was very promptly declared "too light and flimsy," and there was a demand for something new, so the fox terrier was procured. Though his activity and desire to show his teeth were liked, his disposition to show his tail also was not admired, and it was declared that none of the imported dogs met the requirements of the cultured, so one had to be made to order. The result was what is now termed the Boston terrier, which is something between the bull dog and the terrier. Already there is a strong club devoted to this variety, who are determined that all the rest of the dog world shall learn to appreciate the benefit of their achievement.

Chicago heard of the achievement of Boston in the manufacture of a dog, and about the same time information came across the water that Lady Brassey had discovered a new kind of pug in Nubia that was totally black. But Chicago was not to be outdone by Boston, so at the next show given in the Western metropolis a black pug turned up, and as this was getting ahead of both Boston and New York there was an investigation, and it was learned that an enterprising breeder had mated a black and tan terrier to a pug of the usual creamy color, and the result was a pure Nubian black pug like London's latest fad.

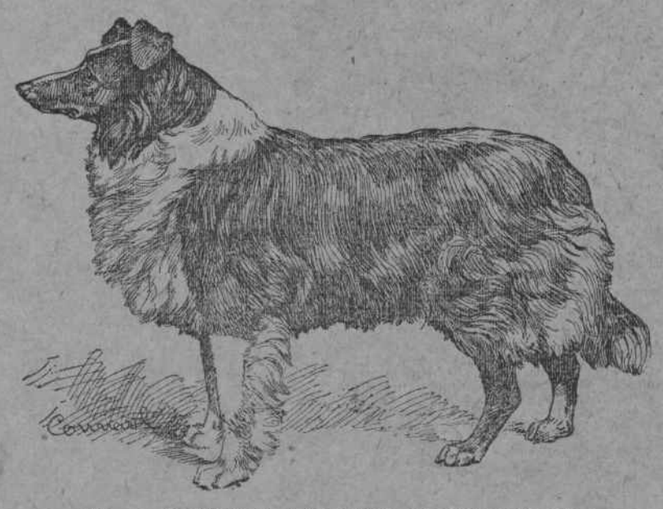
Perhaps the highest price given for a dog recently was $5,000, paid by J. Pierpont Morgan for the Scotch collie Rufford Ormond. It is gravely asserted, however, that this is a purely ornamental sprig of dogdom, and that an old English bobtailed sheep dog, only lately arrived, has more sense than a dozen of this family. The English shepherds say these dogs beat creation for usefulness. They will take their own flock through an inclosure where there are other sheep and not get them mixed, and if they are intentionally mixed up they will go and select one from the other.

The question of cropping dogs' ears will doubtless bring on a hot fight among those who control the destinies of prize dogs in America. It is believed that the best types of the German mastiffs are not brought here, because those who really love these ancient animals crop their ears, and therefore they have not heretofore been exhibited at the dog show. Bismarck's favorite companions are his mastiffs and he crops their ears. The Westminster Kennel Club has provided classes for cropped and uncropped dogs at the coming show.

THIS IS THE NEWEST KIND OF DOG.

ABERDEEN AND BOSTON TERRIERS AND JAPANESE SPANIEL.

THE FASHIONABLE BRITISH BULLDOG.



MR. J. PIERPONT MORGAN'S SCOTCH COLLIE.

A PAIR OF BLACK PUGS.

FAMOUS MASTIFF, PRINCE BEAUFORT.

WHAT WILL THEY DISCOVER NEXT?

Possible Inventions of the Future as Wonderful as Any of the Past.

Vast Power Now Going to Waste Which May Be Utilized for the Benefit of Mankind.

WHAT OCEAN'S WAVES COULD DO.

Coney Island Breakers Might Light New York—A Storage Battery Will Solve the Flying Problem—Can Malleable Glass Be Rediscovered?

The new and wonderful photography which depicts the interior of solid objects and the discovery of argon, a hitherto unsuspected quality of the atmosphere, show that progress nowadays is steady and rapid in the physical sciences. There are several important discoveries now receiving the attention of scientists and experimenters, who, almost any day, may stumble upon the right solution of problems which will yield untold wealth to the discoverer and confer lasting benefits on mankind.

The possible discoveries of the future may make the steam engine obsolete, render war impossible, arrest the progress of disease, annihilate poverty and reduce the hours of labor. By means of mechanisms which have hitherto eluded the grasp of the discoverer, men in the near future may get along without coal, thus saving the expense of mining, and even electricity itself may become a back number.

There is in the first place the vast problem of utilizing the force and power of the sea. The waves that break upon our Atlantic seaboard exert in a single day a greater force than all the steam engines of the United States combined.

Ocean's mighty power, which tosses the largest steamship as a toy, upbuilds vast territories of sand only to destroy them again and thunders on a lee shore with all the violence of the heaven's artillery, is a pitiable spectacle of wasted energy. The mighty strength of Niagara is hardly as great as that of the waves on a hundred miles of seashore.

Electricity, which is now about to distribute Niagara's power in the form of heat, light and force, over a territory of hundreds of square miles, makes it possible to transport the force of the waves to almost any inland city. With a machine which would extract this now wasted energy from the sea, New York might be heated and lighted and all its lines of transportation run; the trolley lines all over the State could dispense with their useless power houses, and the myriad wheels in the mills and factories of Albany, Rochester and Buffalo could be turned by this unseen giant.

The problem involved is merely a mechanical one. You must find a machine which will rise and fall with the tide and which will be so strong as to withstand the greatest force of the incoming breakers.

The swells of ocean which now roll in upon a thousand miles of shore must be stopped and made to give up their force. The machine which will extract this force from the waves must meet them and take it up by preventing them from wasting their strength in simple breakers. A great wheel properly supported and balanced, it would seem, could be turned by these waves, and each revolution might represent thousands of tons of energy.

A somewhat similar problem is how to utilize the mighty force of the tides, which come and go daily with resistless flow. Look in the water at high tide, and its mere weight in a large enclosure represents thousands of horse power, which could be utilized as the water is released. This force has been used in many seaboard countries in a crude and trifling manner, but upon a large and comprehensive scale the experiment has never been tried.

With these mighty force-producers there is another mechanical problem that goes hand in hand. Experimenters in electricity are now trying to find the ideal storage battery.

The electrical storage battery is a machine upon whose discovery many other problems are waiting for solution. The mechanism that would take the power from the waves would be uneven in its work, according as the sea was high or low, but with a proper storage battery the vast energy of a storm could be stored to make up for the inefficiencies of the succeeding calm.

When the ideal storage battery is discovered the flying machine problem will be nearly solved. Men are prevented now from flying because the weight of the propelling engine they have to take along diminishes the lifting power and requires gas-bags, wings, or aeroplanes too big to be practicable.

If you could take along the power of 1,000 horses stored in a two-pound block of metal, releasing it as required, then flying would be within the reach of all. Practicable flying machines would revolutionize warfare, making it possible to drop dynamite on armies and men-of-war, so that forts would be useless and submarine vessels only would be safe. The latter also wait for the storage battery to be discovered.

An intense heat is also wanted. By this means the sand of the seashore could be melted into a cheap and excellent building material, easily handled before the melting and more permanent than any brick.

A way of making cold as easily and cheaply as heat is now produced is also wanted. By this means houses could be cooled in Summer just as they are now heated in Winter, and life in the hottest parts of the tropics could be robbed of many of its terrors. Portable refrigeration is another problem connected with this question.

Malleable glass was used by the Phoenecians, and the secret of how it was made has been lost. The rediscovery of this lost art will revolutionize building.

In medicine it is hoped that bacteriology contains the germ of a new science which will entirely change practice. It is now believed that every disease has its microbe, although a few only have been identified.

With the identification of each disease microbe the discovery of its proper antidote is likely soon to follow. Drugs would thus become obsolete and the stomach would no longer be destroyed by chemicals, an instantaneous effect being secured through the infusion of the proper antidote in the blood.

Telegraphy without wires is a problem upon which Tesla is working. A means to combat the army worm is also wanted, as well as a thorough system for the disinfection of city sewers and a practicable method of household garbage cremation. Photography in the colors of nature has long been the dream of scientists, but it yet remains a mystery.

The new gas is cheaper and more powerful than the old, but can be eclipsed in these respects by electricity. A cheaper electric light is wanted, and there is big money awaiting the man who will invent cheap telephones or cheap typewriters. A new cheap music box has realized fortunes within three years, but its price may be yet reduced.